

## LAW OFFICES

**KELLER AND HECKMAN**

1001 G STREET, N.W.  
SUITE 500 WEST  
WASHINGTON, D.C. 20001  
TELEPHONE (202) 434-4100  
TELEX 40 95551 "KELMAN"  
TELECOPIER (202) 434-4646

BOULEVARD LOUIS SCHMIDT 87  
B-1040 BRUSSELS  
TELEPHONE 32(2) 732 52 80  
TELECOPIER 32(2) 732 53 92

JOSEPH E. KELLER  
JEROME H. HECKMAN  
WILLIAM H. BORGHESE, JR.  
MALCOLM D. MACARTHUR  
WAYNE V. BLACK  
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RALPH A. SIMMONS

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ARCHIE L. HARRIS, JR.  
BRIAN T. ASHBY  
T. PHILLIPS BECK

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DANIEL S. DIXLER, Ph. D.  
CHARLES V. BREDER, Ph. D.  
ROBERT A. MATHEWS, Ph. D.  
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HOLLY HUTMIRE FOLEY  
JUSTIN C. POWELL, Ph. D.  
JANETTE HOUK, Ph. D.  
LESTER BORODINSKY, Ph. D.

TELECOMMUNICATIONS  
ENGINEER  
CHARLES F. TURNER

WRITER'S DIRECT DIAL NUMBER

May 4, 1994

(202) 434-4130

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**MAY - 4 1994**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Room 222  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY  
**VIA HAND DELIVERY**

Re: FCC PR Docket No. 92-235,  
Notice of Proposed Rule Making to  
Refarm Land Mobile Radio Spectrum  
Below 512 MHz;  
Atlantic Richfield Company  
Ex Parte Presentation

Dear Mr. Caton:

Pursuant to Section 1.1206(a)(2) of the Commission's rules, as adopted in the Report and Order in Gen. Docket No. 86-225, 2 FCC Rcd. 3011 (1987), enclosed are copies of the position paper distributed by the Atlantic Richfield Company in ex parte meetings held May 4, 1994 concerning the above-captioned proceeding. We are providing this material on behalf of our clients, Mr. Dan J. Townsend and Mr. R.B. Andersen of the Atlantic Richfield Company who, along with myself and Joseph M. Sandri, Jr. of this firm, attended separate meetings with, respectively:

1. James Coltharp, Office of Commissioner Andrew C. Barrett;
2. Rudolph Baca, Office of Commissioner James H. Quello;
3. Ralph C. Haller, Chief of the Private Radio Bureau; Joseph A. Levin, Chief of the Private Radio Bureau's Policy and Program Planning Branch; and, Doron Fertig, Economist, Private Radio Bureau's Policy and Program Planning Branch.

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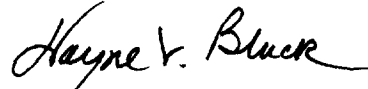
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Mr. William F. Caton  
May 4, 1994  
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KELLER AND HECKMAN

Kindly place this material in the public file. Should you have any comments or questions, please do not hesitate to contact the undersigned.

Cordially yours,

A handwritten signature in cursive script that reads "Wayne V. Black".

Wayne V. Black  
Attorney for  
Atlantic Richfield Company

Enclosure

**ARCO PUBLIC POLICY VIEWS**  
**Federal Communications Commission Proposed Rule -**  
**Making to Refarm Frequencies Below 512 MHz**

- We agree with the FCC's intent to reduce radio congestion.
- Our understanding of the FCC proposal is a two step approach to a 6.25 MHz bandwidth.
- We are concerned that this approach may impact our ability to operate safely.
- We believe this planned obsolescence of equipment places a substantial and unnecessary economic burden on current radio users.
- We recommend focusing technology development on 6.25 MHz equipment by making a single move to 6.25 MHz bandwidths with an appropriate phase-in period.
- We recommend that these regulations be limited to those specific U.S. geographic areas where communications are congested.

**ARCO PUBLIC POLICY VIEWS**  
**Federal Communications Commission Proposed Rule-Making to Refarm**  
**Frequencies Below 512 MHz**

**Summary**

The Federal Communications Commission (FCC) is considering a proposed rule-making to refarm frequencies below 512 MHz to help meet growing demand. This proposal would require users to purchase 12.5 KHz equipment by January 1, 1996, and at a later date, replace that equipment with 6.25 KHz technology.

This two-phased approach will place a substantial and unnecessary economic burden on ARCO and other business users by requiring equipment that is planned to be obsolete in a short time frame. ARCO strongly believes that the objectives of the FCC and the environmental, health and safety needs of the community can most cost effectively be served by making a single move to 6.25 KHz technology. To ease this transition, the FCC should provide an appropriate phase in period for both business users and technology developers.

In addition, frequency refarming and new equipment requirements should be limited to those specific U.S. geographic areas where communications below 512 MHz are congested.

**ARCO PUBLIC POLICY VIEWS**  
**Federal Communications Commission Proposed Rule-Making to Refarm**  
**Frequencies Below 512 MHz**

**Communication and Safety Radio Use at ARCO's Los Angeles Refinery**

ARCO's Los Angeles Refinery covers 640 acres. The refinery operates a radio system, which provides critical communication between units, on twenty-two secondary channels in the 450 MHz band. All of these channels are outside the bands specifically allocated to the petroleum industry. The refinery is currently in need of more channels but has not been able to obtain permits because of potential interference problems in their congested operating area.

The twenty-two radio channels are currently used to communicate critical simultaneous instructions to the 450 employees who conduct field operations which require tight coordination and synchronized timing for safe and efficient operation of the refinery. If this vital communication link were to be impaired, both plant personnel and the surrounding community would be more exposed to the potential of spills, releases, fires, etc. Furthermore, during the infrequent occurrences of these incidents, the immediate response provided by radio communication is extremely important to the safety of plant personnel and the community.

The radio system is also the critical communications tool for external emergency responses. For example, during the recent Northridge earthquake, radios were the backbone of the refinery's emergency response system. In addition to operational use, the security department uses the radios for plant security access coordination. The radios were instrumental in restricting access to the refinery during the months of the emotionally charged Rodney King trials.

The frequencies in the 450 MHz band currently used by the refinery, are well suited to local coverage because they bend and exhibit less shadowing than other available frequencies (i.e. the 800 MHz band). In addition, the refinery's radios are locally contained which is important because regional transmitters cannot guarantee uninterrupted service.

**Exclusivity**

The existing low power channels used by ARCO's Los Angeles refinery are sufficiently coordinated to minimize interference from other users. However, under the proposed regulations, the possibility of adjacent high power channels may result in increased interference. Given the critical functions requiring radio use within the refinery, exclusive use of channels is imperative. Sharing of channels could result in confusion and misdirection in an emergency and adversely affect the daily operating requirements of clear and concise communications.

**ARCO PUBLIC POLICY VIEWS**  
**Federal Communications Commission Proposed Rule-Making to Refarm**  
**Frequencies Below 512 MHz**

In addition, channel exclusivity could increase the supply of channels and address a significant part of the congestion problem in the LA Basin. If end users implement trunking systems on their exclusive channels, they can operate with approximately half the number of channels previously required.

**Proposed Move to 12.5 KHz Bandwidth**

Because of the large number of current secondary users, moving to 12.5 KHz bandwidths may actually reduce the availability of channels in the congested LA Basin. As the bandwidths tighten, interference from secondary users becomes more of a problem. As we understand the proposed regulations, Phase I would at least double the number of primary channels available, but it would eliminate some, if not all, of the multiple secondary users that are currently operating between primary channels.

Our suppliers have informed us that we can not adjust our existing equipment to operate under Phase I as suggested in the FCC proposal. We would have to purchase new hardware to operate in 12.5 KHz bandwidths which would cost our Los Angeles refinery approximately \$7MM and ARCO as a whole approximately \$17MM.

**Proposed Move to 6.25 KHz Bandwidth**

A move to 6.25 KHz bandwidths quadruples the number of primary channels available. Unfortunately, the narrowed bandwidths could result in loss of capture effect and magnify other technical problems (i.e. inter-modulation, multipath, frequency stability, fading, etc.). Currently, equipment vendors have not developed technology that addresses these problem in the 6.25 KHz bandwidth, making an immediate move to this bandwidth impossible.

Since hardware for the 12.5 KHz bandwidth is currently incompatible with the 6.25 KHz bandwidth, this phase would require an additional equipment purchase at our Los Angeles refinery of approximately \$7MM and would cost ARCO as a whole approximately an additional \$24MM.

**Multiple Investments**

It is becoming increasingly difficult for the domestic oil industry to compete with foreign competitors who are not incurring comparable environmental and regulatory costs. At a time when the U.S. petroleum industry is making substantial investments to comply with environmental, health, and safety regulations, we do not feel it is appropriate to burden radio users like ARCO with

**ARCO PUBLIC POLICY VIEWS**  
**Federal Communications Commission Proposed Rule-Making to Refarm**  
**Frequencies Below 512 MHz**

investments in equipment that will be regulated obsolete in a very short time frame.

Like other large companies, we have a fixed pool of money for capital investments. If we are required to spend this capital pool on mandated regulatory projects, like new radio equipment, we must cut funding for other projects. For example, projects we expect to fund in the same time frame include: oil exploration and production, expansion of product distribution networks, and new retail service stations. These projects are investments which generate economic returns from increases in productivity, reliability, and profitability which benefit our employees, shareholders, and the communities in which we operate.

In recent years, environmental and regulatory mandated projects have been requiring increasing percentages of our capital pool. This is very apparent in California where refineries are making huge environmental investments just to stay in business. However, environmental projects, which are not profit generating, do provide benefits to the community in cleaner air, water, and soil.

Unlike our profit generating investments and mandated environmental projects, the interim investment in radio equipment increases our costs with no economic gains for our shareholders or our communities. The only beneficiaries of this proposed interim investment are the radio equipment manufacturers.

### **Geographical Application and Timing**

There is an eminent need to address frequency supply in congested areas in the U.S. However, many facilities operate in remote locations that do not face the same congestion problems. We request that the proposed regulations apply only to congested areas. Further, for those congested areas, we recommend an appropriate phase in period to give users adequate time to evaluate future communication needs, equipment, and technology.

### **Conclusion**

We understand the need for a single investment in radio equipment but believe that the two, sequential investments, with planned obsolescence, which the FCC proposal would require are unnecessary and inappropriate. Rather, we strongly recommend that the FCC make a single move to 6.25 MHz technology, with exclusive channel use, and with an appropriate phase in period for both business users and technology developers. We further recommend that frequency refarming below 512 MHz and related new equipment requirements be limited to those U.S. geographic areas with congested communications.